

DIAGRAM "A"  
RELOCATION OF FDRS R16, R17 & FUJI  
(SEE THIS DWG. & DWG. #E-65 FOR PLANS & SECTIONS)

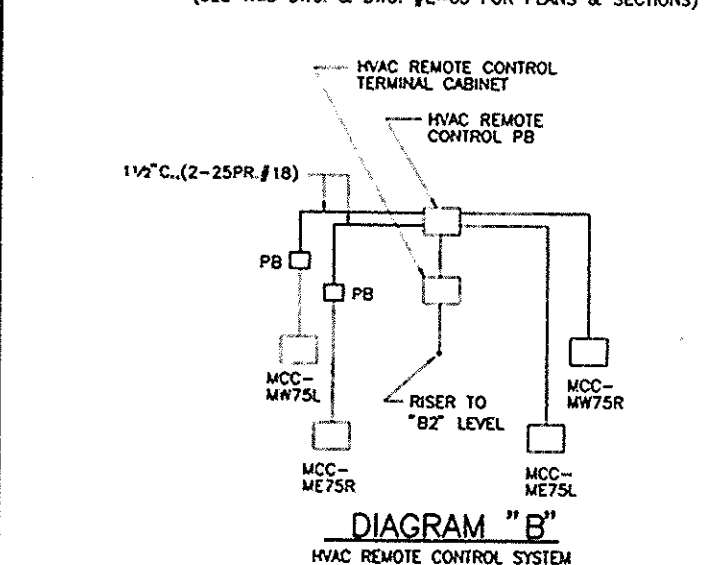
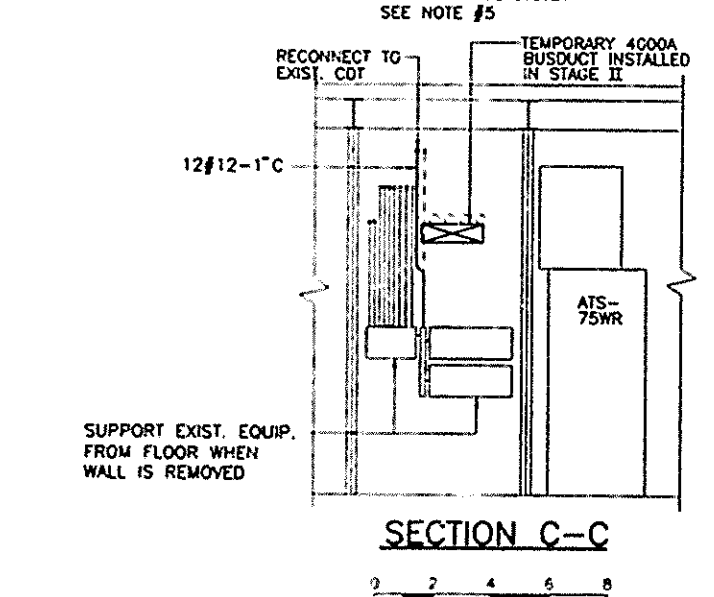
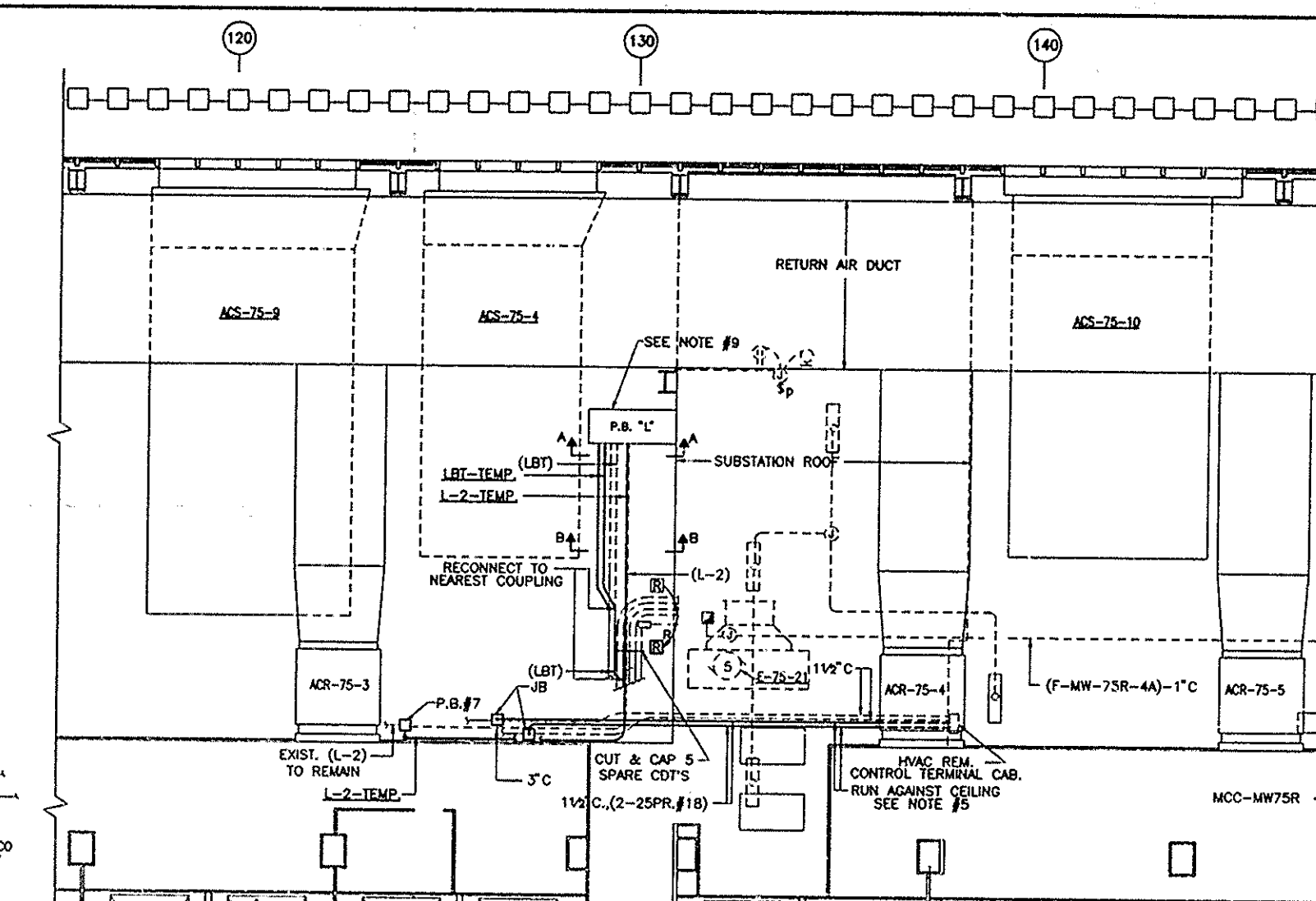


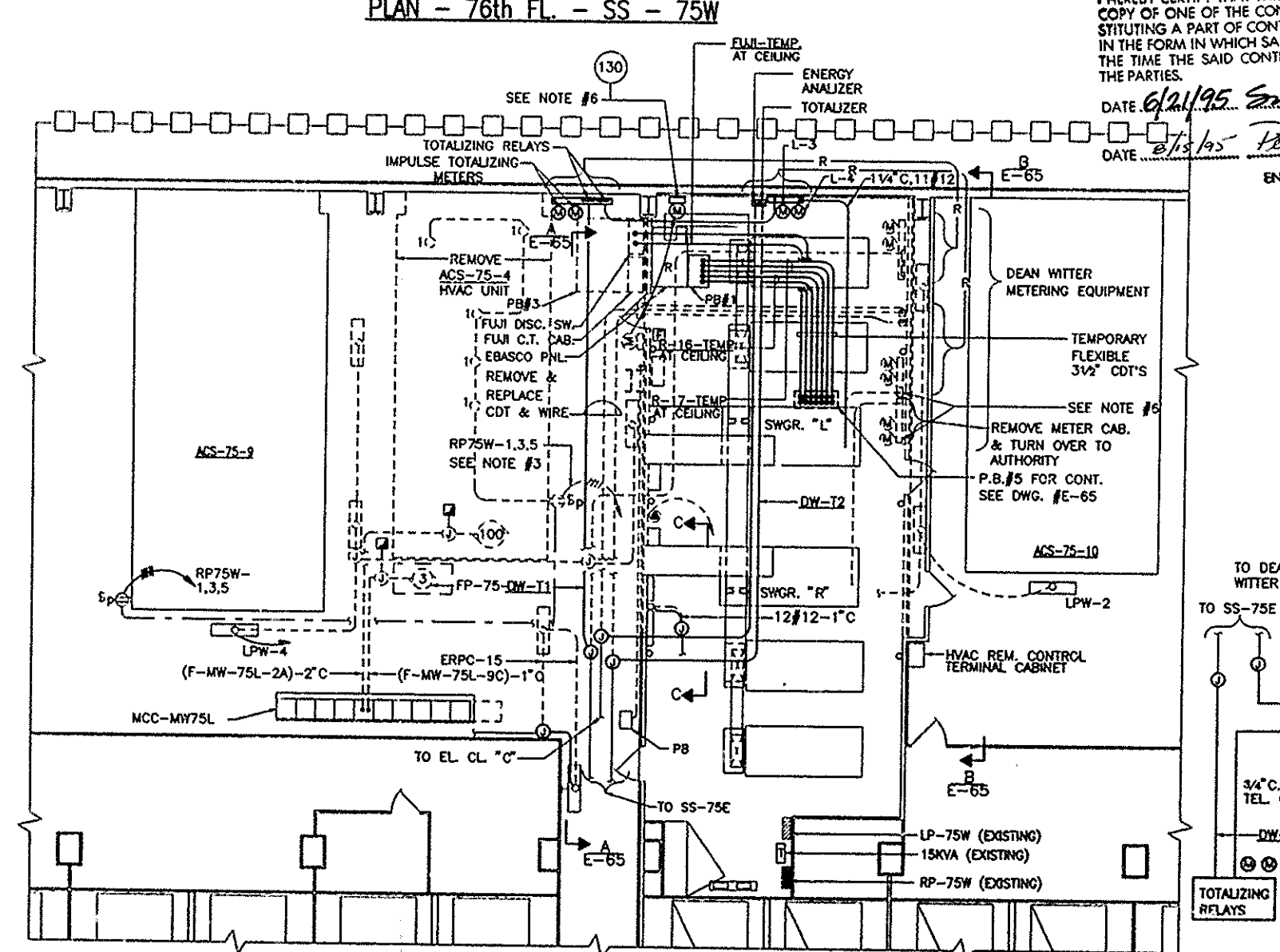
DIAGRAM "B"  
HVAC REMOTE CONTROL SYSTEM  
SEE NOTE #5



SECTION C-C



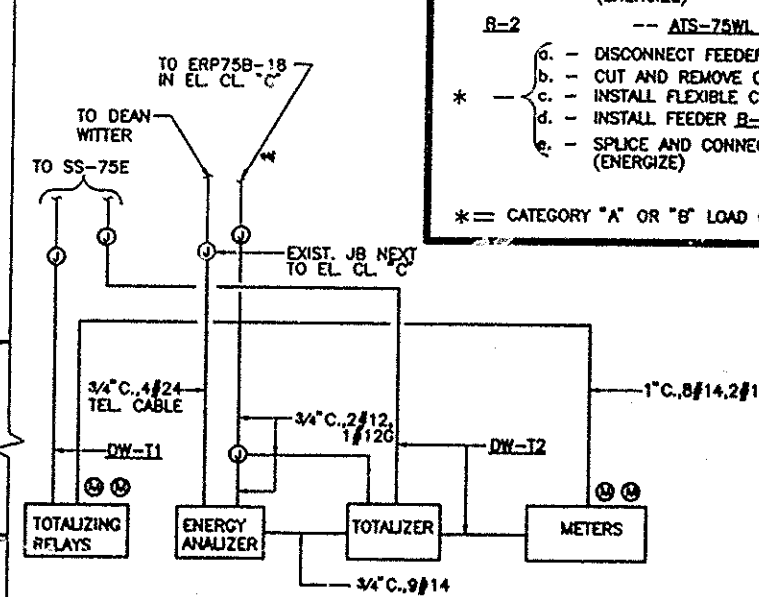
PLAN - 76th FL. - SS - 75W



PLAN - 75th FL. - SS-75W

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. WTC-802.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 6/21/95 William A. Aslam  
SPEC WRITER  
DATE 8/5/95 Peter K. Swearing  
ENGINEER OF DESIGN



RELOCATION DIAGRAM OF DEAN  
WITTER METERING EQUIPMENT  
N.T.S.

- ## NOTES
- 1.-FOR LEGEND SEE DWG. #E-1. FOR GENERAL NOTES, ABBREVIATIONS AND LIGHTING FIXTURE SCHEDULE SEE DWG. #E-2.
  - 2.-FOR TYPICAL SUBSTATION, STAGE I SEQUENCE OF INSTALLATION SEE DWG. #E-4.
  - 3.-REMOVE RECEPTACLE AND BRANCH CUT. WIRING (RP-75N-1.3.5) BACK TO PHIL. ABANDON CONDUIT IN FLOOR SLAB, CUT CONDUIT STUB-UPS FLUSH WITH FLOOR SLAB AND PLUG CONDUIT.
  - 4.-INTERCEPT AND REROUTE EXISTING WIRING SYSTEM TO PROVIDE SPACE FOR NEW INSTALLATION. PROVIDE JUNCTION BOX AT THE ENDS OF CONDUITS THAT REMAIN. INSTALL WIRE IN REROUTED CONDUIT SECTION AS SHOWN AND SPlice TO EXISTING WIRES IN JUNCTION BOXES.
  - 5.-REMOVE AND INSTALL HVAC REMOTE CONTROL CONDUIT AND CABLE RUNS AS SHOWN ON PLAN AND AS DESCRIBED BELOW. (FOR CABLE SPEC. SEE NOTE #17 DWG. #E-2)
    - A.-CUT EXISTING CONDUIT AND CABLE APPROX. 2'-0" FROM NEAREST COUPLING. REMOVE 2'-0" ± SECTION OF CONDUIT TO COUPLING EXPOSING CABLE.
    - B.-REMOVE CONDUIT AND CABLE RUN TO EXISTING HVAC REM. CONTROL TERMINAL CABINET.
    - C.-INSTALL PULL BOX, CONDUIT AND CABLE RUN TO HVAC REM. CONTROL TERMINAL CABINET.
    - D.-AT ONE END SPlice TO EXISTING CABLE IN PULL BOX, AT OTHER END CONNECT CABLE TO HVAC REMOTE CONTROL TERMINAL CABINET.
  - 6.-RELOCATE REVENUE METER PAN(S) AND METER(S) TO LOCATION SHOWN ON PLAN. REROUTE EXISTING METERING WIRING FROM SWITCHBOARDS "L" TO NEW METER LOCATION(S).
  - 7.-FOR CONDUIT AND CABLE SCHEDULE STAGE I SEE DWG. #E-66.
  - 8.-ALL ELECTRICAL OUTAGES SHALL BE PERFORMED OUTSIDE NORMAL BUILDING OPERATING HOURS. SEE SPECIFICATIONS DIVISION 1 ENTITLED "CONDITIONS AND PRECAUTIONS" FOR DESCRIPTION OF ELECTRICAL POWER OUTAGE CATEGORIES.
  - 9.-REDUCE SIZE OF PULL BOX "L" AS SHOWN.

### SEQUENCE OF INSTALLATION-STAGE I

- FDR'S R-18, R-17, FUJI, L-2 & LBT
- R-16, R-17      -- EBASCO-ATS
- a. - INSTALL PB#1, PB#5 & COT'S R-16-TEMP, R-17-TEMP.
  - b. - INSTALL CONDUCTORS R-16-TEMP, & R-17-TEMP.
  - c. - FROM PB#5 TO COT'S R-16-TEMP, & R-17-TEMP.
  - \* - { d. - CUT AND REMOVE CONDUITS AND CONDUCTORS AS SHOWN.
  - e. - INSTALL PB#5A & COT'S R-16, R-17 AS SHOWN.
  - f. - INSTALL CONDUCTORS R-16 & R-17 FROM PB#5A TO PB#5.
  - g. - DISCONNECT CONDUCTORS AT EBASCO PNL.
  - h. - SPLICE AND CONNECT CONDUCTORS IN PB#5A, PB#5 AND EBASCO PANEL. (SUPPLY)
- FUJI      -- FUJI PANEL PP-80A (ELECTRIC A/C UNITS IN UPS RM.)
- \* - { a. - DEENERGIZE COLLECTOR BUS.
  - b. - DISCONNECT AND REMOVE FEEDER AT EBASCO PANEL AND REENERGIZE COLLECTOR BUS.
  - c. - REMOVE FDR'S, PB#3 & PB#6 AS SHOWN.
  - d. - INSTALL PB#5B AND CONDUITS AS SHOWN.
  - e. - INSTALL FDR FUJI-TEMP FROM PB#5 TO FUJI DISC. SW.
  - \* - { f. - DEENERGIZE COLLECTOR BUS AND INSTALL FDR FUJI-TEMP FROM FUJI C.T. CABINET TO EBASCO PNL.
  - g. - REENERGIZE COLLECTOR BUS.
- \* - { h. - INSTALL CONDUCTORS FUJI FROM PB#5B TO PB#5.
  - i. - SPLICE AND CONNECT CONDUCTORS IN PB#5, PB#5B, FUJI PNL, DISC. SW., C.T. CABINET AND EBASCO PANEL. (ENERGIZE)
- L-2      -- HOT WATER HEATERS
- \* - { a. - DISCONNECT FEEDER AT SWGR. "L"
  - b. - CUT AND REMOVE CONDUIT AND CONDUCTORS AS SHOWN.
  - c. - INSTALL PB#7 AND FLEXIBLE COT AS SHOWN.
  - d. - INSTALL FEEDER L-2-TEMP. FROM PB#7 TO SWGR. "L".
  - e. - SPLICE AND CONNECT FEEDER IN PB#7 AND AT SWGR. (ENERGIZE)
- LBT      -- FIRE PUMP
- \* - { a. - DISCONNECT FEEDER AT SWGR. "L"
  - b. - CUT AND REMOVE CONDUIT AND CONDUCTORS AS SHOWN.
  - c. - INSTALL FLEXIBLE COT'S AS SHOWN.
  - d. - INSTALL FEEDER LBT-TEMP. FROM EXIST. PB TO SWGR. "L".
  - e. - SPLICE AND CONNECT FEEDER IN PB AND AT SWGR. (ENERGIZE)
- R-2      -- ATS-75WNL (SEE DWG. #E-86)
- \* - { a. - DISCONNECT FEEDER AT PANEL EPC-75B AND ATS-75WNL.
  - b. - CUT AND REMOVE CONDUIT AND CONDUCTORS AS SHOWN.
  - c. - INSTALL FLEXIBLE COT'S AS SHOWN.
  - d. - INSTALL FEEDER R-2-TEMP. FROM ATS TO EPC-75B.
  - e. - SPLICE AND CONNECT FEEDER IN ATS AND AT PNL. (ENERGIZE)
- \* = CATEGORY "A" OR "B" LOAD OUTAGE-SEE NOTE #8

Sheet 149 of 224



**THE PORT AUTHORITY  
OF NY & NJ**

*Peter K. Sweeney*  
ENGINEERING PROGRAM MANAGER  
WORLD TRADE CENTER

*S. H. [Signature]*  
CHIEF ELECTRICAL ENGINEER

Engineering Department					
Design Divisions					

# The World Trade Center Electrical/HVAC Upgrade Program

Title  
TOWER ONE AND TWO  
LOW VOLTAGE  
SUBSTATIONS  
CONSTRUCTION AND  
INSTALLATION

ELECTRICAL  
SUBSTATION SS-75W  
STAGE I  
REMOVAL AND  
RELOCATION PLANS  
SHEET #1

No.	Date	Revision	Approved
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This drawing subject to conditions in contract.  
All inventions, ideas, designs and methods  
herein are reserved to Port Authority and  
may not be used without its written consent.

ROYZMAN  
FISCHER  
Designed by

ROYZMAN  
Drawn by

A.S.  
Checked by

Date 5-1-95 Scale AS NOTED

Contract Number      Drawing Number  
WTC 802.071      E-63